




DESHBANDHU COLLEGE
(UNIVERSITY OF DELHI)
KALKAJI, NEW DELHI - 110019
Faculty Details Proforma for College Website

Title	Dr.	First Name	Bharti	Last Name	Badhani	Photograph
Designation	Assistant Professor					
Address (O)	Department of Chemistry, Deshbandhu College, University of Delhi, Kalkaji, Delhi - 110019					
Phone No. Office	--					
Residence Mobile	--					
Email	bbadhani@db.du.ac.in					
Educational Qualifications						
Degree	Institution				Year	
Ph.D.	University of Delhi				2016	
PG	University of Delhi				2012	
UG	University of Delhi				2010	
Any other qualification						
Career Profile						
Worked as Assistant Professor in: <ul style="list-style-type: none"> • Deshbandhu College, University of Delhi • Hindu College, University of Delhi • St. Stephen's College, University of Delhi 						
Administrative Assignments						
Member of various college committees, including: <ul style="list-style-type: none"> • IQAC Extended Committee • DBT-STAR College Data & Website Coordination Committee • Chemistry Website Committee • Annual Report 2020 – 21 • ERP Committee 						
Areas of Interest/Specialization						
Physical Chemistry, Computational Chemistry						
Subjects Taught						
Physical Chemistry, Applications of Computer in Chemistry, Business Skills for Chemists, Environmental Science						
Publications Profile						
<i>Research papers published in Refereed/Peer Reviewed Journals:</i> <ul style="list-style-type: none"> • Jogender, Bharti Badhani, Mandeep & Rita Kakkar (2020) A DFT – D2 study on the adsorption of phosgene derivatives and chloromethyl chloroformate on pristine and Fe₄-decorated graphene. 						

J. Mol. Graph. Model., 101, 107754.

- Jogender, Mandeep, Bharti Badhani & Rita Kakkar (2020) Adsorption of methyl isocyanate on M_4 ($M = Fe, Ni$ and Cu) cluster – decorated graphene and vacancy graphene: A DFT – D2 study. Struct. Chem., 31, 1983 – 1997.
- Bharti Badhani & Rita Kakkar (2017) Structural, Electronic and Reactivity Parameters of Some Triorganotin(IV) Carboxylates: A DFT Analysis. Struct. Chem., 29, 753 – 763.
- Bharti Badhani & Rita Kakkar (2017) Influence of Intrinsic and Extrinsic Factors on the Antiradical Activity of Gallic Acid: A Theoretical Study. Struct. Chem., 29, 359 – 373.
- Bharti Badhani & Rita Kakkar (2017) DFT Study of Structural and Electronic Properties of Gallic acid and its Anions in Gas Phase and in Aqueous Solution. Struct. Chem., 28, 1789 – 1802.
- Bharti Badhani & Rita Kakkar (2016) In silico Studies on Potential MCF-7 Inhibitors: A Combination of Pharmacophore and 3D-QSAR Modeling, Virtual Screening, Molecular Docking and Pharmacokinetic Analysis. J. Biomol. Struct. Dyn., 35, 1950 – 1967.
- Bharti Badhani, Neha Sharma & Rita Kakkar (2015) Gallic acid: A Versatile Antioxidant with Promising Therapeutic and Industrial Applications. RSC Adv., 5, 27540 – 27557.
- Rita Kakkar, Smriti Sharma & Bharti Badhani (2014) Density Functional Study of Functionalization of Carbon Nanotubes with Carbenes. Can. Chem. Trans., 2, 434 – 449.

Other publications:

- Content Writer in e-PG Pathshala (Chemistry) - A Centrally sponsored scheme of National Mission on Education through ICT (NMEICT) of MHRD (GoI) through UGC.

Conference Organization/ Presentations

Organization of a Conference:

- Two days International e-Conference on Recent Advancements in Chemical Sciences: Health, Environment and Society, organized by Department of Chemistry, Deshbandhu College, University of Delhi, India, 08 – 09 April 2022.
- Member, Quiz Committee in International Symposium on Chemical Wisdom by Her, organized by Department of Chemistry, Deshbandhu College, University of Delhi, India, 31 January 2022.
- Resource person in “Skill Up” – A Workshop on Laboratory Safety and Management for Chemistry Lab Staff, organized by Department of Chemistry, Deshbandhu College, University of Delhi, India, 22 – 24 December 2021.
- Evaluator in Vidyarthi Vigyan Manthan 2019-20, organised by Vijana Bharti in association with Vigyan Prasar, DST, NCERT and MHRD, at Deshbandhu College, University of Delhi (2020).
- Yusuf Hamied Inspirational Chemistry Programme, organized by Royal Society of Chemistry in collaboration with Association of Chemistry Teachers and Hindu College, University of Delhi, India (2018).
- International Conference on Advancing Green Chemistry: Building a Sustainable Tomorrow, jointly organized by Hindu College and Green Chemistry Network Centre, Department of Chemistry, University of Delhi (2017).
- 1st National Conference on Emerging Trends and Future Challenges in Chemical Sciences, Kirori Mal College, University of Delhi (2016).
- Workshop on Electronic Structure, Atomistic and Statistical Modelling in Chemistry, Materials and Life Science, jointly organized by the University of Delhi, Royal Society of Chemistry and

Schrödinger GmbH (2014).

Participation as Paper/Poster Presenter:

- International Conference on Drug Discovery (ICDD), jointly organized by Schrödinger Inc, USA and BITS Pilani Hyderabad, India (2020).
- Faculty Development Programme entitled “From Chemistry of Life to Chemistry of Diseases: Understanding Clinical Biochemistry”, organized by Daulat Ram College, University of Delhi (2017).
- 10th European Conference on Computational Chemistry organized by EuCheMS, Germany (2015).
- 13th Annual Meeting of the Society for Free Radical Research - India (SFRR-India'14) on Recent Trends in Free Radical and Antioxidant Research organized by SFRR, Mumbai (2014).
- 20th ISCB International Conference (ISCBC-2014) on Chemistry and Medicinal Plants in Translational Medicine for Healthcare, University of Delhi (2014).
- National Conference on Recent Advances in Computational Drug Design (RACDD) jointly organized by Schrödinger and Indian Institute of Science (IISc), Bangalore (2013).

Conferences/Workshops Attended:

- Several national & international conferences, seminars, FDP, workshops, and webinars attended.

Awards and Distinctions

- **Prof. R. P. Mitra Gold Medal** awarded by the University of Delhi for being the best candidate in M.Sc. Chemistry.
- **Award for Academic Excellence** by Hindu College for excelling in postgraduate studies and securing 1st position.
- **Science Meritorious Award** by Department of Chemistry, University of Delhi for securing 1st position.
- **Travel Grant** for Germany.
- **Senior Research Fellowship** by CSIR.
- **Junior Research Fellowship** by CSIR.
- **NET-CSIR (JRF)**. All India Rank: 13th.

Cultural/Extracurricular Activities

- Co-Convenor, Physical Science Society
- Teacher Coordinator, Leaf Painting Competition, Annual festival of Synergia (Synapse'22)
- Participation in annual festival of Chemistry Department – *Resonance*, as Coordinator/Judge
- Participation in seminars/workshops/conferences/webinars organized by Chemistry Department
- Participation in various events organized by college